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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/814,187	03/21/2001	Shigeaki Watanabe	NAK1-BA81a	7440

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EXAMINER

LAMBRECHT, CHRISTOPHER M

ART UNIT	PAPER NUMBER
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2623

DATE MAILED: 08/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/814,187	WATANABE ET AL.	
	Examiner	Art Unit	
	Christopher M. Lambrecht	2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 43-53 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 43-53 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date: _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 43-53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shoff et al., U.S. Patent No. 6,240,555 (of record) in view of Allibhoy et al., U.S. Patent No. 5,818,440.

Regarding to claims 43 and 53, Shoff discloses a data presentation control apparatus (STB 26, fig. 2, col. 4, ll. 23-28) and corresponding control program comprising: a receiving unit (viewer computing unit 90, fig. 5) for receiving a digital video stream (col. 5, ll. 1-5, col. 8, ll. 4-10) having a plurality of contents therein which make up a broadcast program (e.g., video scenes and associated supplemental content, col. 10, ll. 50-58), the plurality of contents each being a unit of information for which interactive operations are provided to a user to be performed (col. 10, ll. 18-58), each unit of information including link information for indicating one of the other units of information (supplemental content keyed to frame numbers, col. 10, ll. 14-17), whereby performance of one of the interactive operations provided to the user by the unit of information being displayed will cause the linked unit of information to be displayed (e.g.: col. 9, ll. 54-59; col. 11, ll. 20-33; col. 12, ll. 7-23); an

Art Unit: 2623

extracting unit for separating data necessary for a display of each of the plurality of contents from the digital video stream received by the receiving unit (col. 10, ll. 34-37); a data storage unit (storage associated with processor 92, e.g., internal cache or volatile memory 94, fig. 5) for storing the separated data (where browser module 106 is loaded onto the processor upon initiation of an interactive session for rendering the supplemental content data, col. 9, ll. 27-29; thus, the timing information and display layout which were extracted from the received program are stored therein for rendering thereof); a display control unit (processor 92) for controlling the display of the plurality of contents in response to performance of an interactive operation by the user (col. 9, l. 66 - col. 10, l. 3), wherein each of the plurality of contents has at least one instruction for controlling the display of the content and time control information for indicating a time at which the instruction is to be executed (col. 10, ll. 34-58); a present time information obtaining unit for obtaining a present time (col. 10, ll. 7-17); and a time information judging unit for judging whether the instruction should be executed by comparing the present time with the time indicated by the time control information (col. 10, ll. 7-17), wherein the display control unit, in the case where the time information judging unit judges that the instruction should be executed, changes the display of the currently displayed content by executing the instruction (col. 11, ll. 56-62), and the display control unit executes an instruction specified by handler information (see Table 2) included in the digital video stream (col. 10, ll. 18-22) in response to performance by the user of one of the interactive operations, to change the currently displayed unit of information to the linked unit of information (col. 11, ll. 55-65). Shoff fails to disclose the digital video

stream is an MPEG-2 transport stream. However, in an analogous art, Allibhoy discloses interactive television system employing an MPEG-2 transport stream, which enables compression of the interactive programming (col. 5, ll. 24-32). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Shoff to include an MPEG-2 transport stream, as taught by Allibhoy, for the benefit of reducing transmission bandwidth and thus transmission costs.

As to **claim 44**, Shoff and Allibhoy together disclose the data display control apparatus of claim 43. Shoff further discloses an operation indication receiving unit (mechanism for actuating on-screen icons) for receiving an operation indication inputted by a user (col. 9, ll. 54-59), wherein the time control information (of target resources, col. 13, ll. 17-20) includes for the operation indication (i.e., triggers), a combination of (a) a piece of handler information specifying an instruction in correspondence with each of the operation indications ("event" tag Table 2, relates trigger events with one or more instructions as defined in "action" tags to be executed; see discussion of selectable icons/soft buttons with respect to figs. 8a-c, col. 10, l. 59 - col. 11, l. 47), and (b) a valid period of the piece of handler information (see description of time-based "trigger" tags, Table 2, col. 13, ll. 23-28, as used in controlling when supplemental content is rendered, i.e., activated, thus beginning a valid period for the pieces of handler information of a given supplemental content); and in the case where the display control unit is displaying a content and the operation indication receiving unit has received an operation indication from the user, the display control unit changes the display of the currently displayed content by executing the instruction specified

Art Unit: 2623

by the piece of handler information (col. 10, l. 64 - col. 11, l. 11), if the present time obtained by the present time information obtaining unit (i.e., the present time) is within the valid period that is combined with the piece of handler information corresponding to the operation indication received (i.e., for a given supplemental content comprising multiple pieces of handler information defining instructions to execute in response to specific triggers/operation indications inputted by the user, the display control unit will execute an instruction as defined by a piece of handler information defined to respond to the particular user operation indication if said piece of handler information has been rendered, i.e., is valid at the present time).

As to **claim 45**, Shoff and Allibhoy together disclose the data display control apparatus of claim 44. In addition, Shoff discloses the instruction is an instruction for switching the content being displayed over to the linked content indicated by the link information of the content being displayed (col. 11, ll. 3-11).

As to **claim 46**, Shoff and Allibhoy together disclose the data display control apparatus of claim 44. In addition, Shoff discloses each of the plurality of contents includes on-screen information for forming image data and on-screen graphics (col. 5, ll. 23-32) to be displayed superimposed on the image data (col. 10, ll. 44-50), the on-screen information includes, for each of the on-screen graphics, initial state information (display layout) for indicating a state of the on-screen graphics at a beginning of a display of each of the plurality of contents (col. 10, ll. 34-44), the instruction includes another instruction for changing the state of the on-screen graphics being displayed (col. 11, 48-65), and the display control unit,

upon displaying each of the plurality of contents, displays the on-screen graphics in the state indicated by the initial state information (col. 10, ll. 50-53), and in the case where the time information judging unit judges that the instruction should be executed, changes the state of the on-screen graphics being displayed, by executing the instruction (col. 11, ll. 48-55).

As to **claim 47**, Shoff and Allibhoy together disclose the data display control apparatus of claim 44. In addition, Shoff discloses each of the plurality of contents includes on-screen information for forming on-screen graphics (interactive program listings 48, fig. 3) that are displayed elements in each of the plurality of contents (as displayed by EPG application, col. 8, ll. 41-44), the on-screen information includes, for each of the on-screen graphics, a combination of (a) display status information for indicating a state in which the content is displayed (e.g., supplemental content, etc., fig. 3), and (b) a date and time (see fig. 3); and the display control unit changes the state of the on-screen graphics being displayed according to the present time, using the combination of the display status information (titles, channels, etc...) and the date and time (sorted for display according to viewing times and dates, col. 8, ll. 35-51).

As to **claim 48**, Shoff and Allibhoy together disclose the data display control apparatus of claim 44. In addition, Shoff discloses the time information judging unit judges that the instruction should be executed when the present time obtained reaches the time indicated by the time control information (col. 11, ll. 48-64).

As to **claim 49**, Shoff and Allibhoy together disclose the data display control apparatus of claim 44. In addition, Shoff discloses each of the plurality of contents includes

on-screen information for forming on-screen graphics (col. 5, ll. 23-32); the display control unit displays the on-screen graphics according to the on-screen information (col. 11, ll. 48-51); the time judging information unit judges that the instruction should be executed in the case where the present time obtained reaches the time indicated by the time control information while the on-screen graphics are being displayed (col. 11, ll. 59-65).

As to **claim 50**, Shoff and Allibhoy together disclose the data display control apparatus of claim 44. In addition, Shoff discloses each of the plurality of contents further includes audio data (voice announcement, col. 11, ll. 16-18) and reproduction time control information for indicating a time at which the audio data is to be reproduced (i.e., upon user triggering soft button 217, col. 11, ll. 16-18); and the data display control apparatus controls reproduction of the audio data according to the time indicated by the reproduction time control information (i.e., with each event triggered by the user interacting with soft button 217, the voice announcement is sounded, col. 11, ll. 16-18).

As to **claim 51**, Shoff and Allibhoy together disclose the data display control apparatus of claim 44. In addition, Shoff discloses each of the plurality of contents includes time information for indicating a time at which the content has been transmitted (col. 10, ll. 7-9), when the display control unit displays the content to be displayed, the extracting unit separates the time information from the digital video stream received by the receiving unit and stores the time information in the data storage unit (storage associated with processor 92, e.g., internal cache or volatile memory 94, fig. 5; col. 10, ll. 34-43); the present time

information obtaining unit obtains the present time by specifying the present time according to the time information stored in the data storage unit (col. 10, ll. 7-9, 50-53).

As to **claim 52**, Shoff and Allibhoy together disclose the data display control apparatus of claim 44. In addition, Shoff discloses the present time information obtaining unit obtains the present time by measuring an elapsed time from a certain standard timing (col. 10, ll. 9-14).

Response to Arguments

Applicant's arguments with respect to claims 43-53 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher M. Lambrecht whose telephone number is (571) 272-7297. The examiner can normally be reached on Mon-Fri, 9:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller can be reached on (571) 272-7353. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2623

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Christopher M. Lambrecht
Examiner
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